Advanced Education Council of British Columbia

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ACCESS FOR

EQUITY AND OPPORTUNITY

In the British Columbia
College/Institute/Agency System:

The Need for a
Long Term Commitment as an
Investment in the Present and Future

SUMMARY/ACTION PLAN

Prepared By:

Advanced Education Council
of British Columbia
Access Task Force

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Background

The 15 Community Colleges and 4 Institutes and Agencies providing post-secondary education and training in B.C. have achieved considerable success with respect to:

> **Affordability** (tuition costs are reasonable, student costs associated with daily living are not inflated, and taxpayer costs per student are moderate);

> **Geographic accessibility** (campuses in all cities and many towns provide opportunities for students to study which are not time or place dependent);

> **Effectiveness** (high rates of graduate employment, and student and employer satisfaction with program quality and outcomes); and,

> **Flexibility** (programs and services are tailored to meet the specific provincial and local needs of British Columbians).

However, all is not well for the potential beneficiaries of the College/Institute/Agency system:

> students are being turned away from institutions and classes all around the province because of enrolment quotas and capacity limitations;

> employers are having difficulty finding the skilled employees they need - at a time when it should be less difficult because of high levels of unemployment;

> criticisms from the public are being heard that some groups of students are granted greater access to post-secondary education than others;

> concerns about the social and economic costs of under-educated adults: especially those with low levels of literacy and those who do not speak English;

What students and parents are saying:

"The admissions process was fair for me but now students are having a tough time getting courses they want or need."

"My first three semesters here I barely got any courses I wanted. I had to sit in a lot of classes and do a lot of begging to be admitted into certain classes."

"It takes too long to actually get the courses you came here to register for."

"Not enough courses available, courses always full, very stressful situation. The students always loses - financially and academically."

> painfully slow progress is being made in moving to a culture of lifelong learning, despite the consensus on its importance; and

> the fastest growing regions in the province are those which have the least access to local community college programs.

Process

The Advanced Education Council of British Columbia is an umbrella organization, that represents all of the Colleges, Institutes and Agencies of B.C. In June, the Council sets its priority for the coming year. During each of the past three years the Council has identified Access as the priority issue it would address. This year the Council wishes to bring vital Access issues to the attention of the Minister of Advanced Education, Training and Technology, and to the attention of the public in a structured fashion. To do this, the Council created an Access Task Force to study and report on these issues within the provincial College/Institute/Agency system.

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The membership of the Access Task Force included representatives of College/Institute/Agency system instructors and staff (C.I.E.A., C.U.C.I. as observers), students, board members and administrators. The Conclusions and Recommendations contained in the Task Force report emerged based on analysis and discussion from all of these perspectives, about the abilities and responsibilities of the College/Institute/Agency system.

The Access Task Force was charged with documenting the demand and societal need for access to the post-secondary system over the next five years, and to propose solutions to the access problems identified. The report of the Task Force complements the Review of Student Financial Assistance and Barriers to Post-Secondary Education (Orum Committee), and the recently released findings of the Client Survey Project conducted by the Ministry. The following key findings in the Ministry report were:

> students surveyed expect post-secondary education to supply fulfilling, well paid careers, as well as promote intellectual development. On balance, career opportunities after graduation were considered somewhat more important than intellectual development; and,

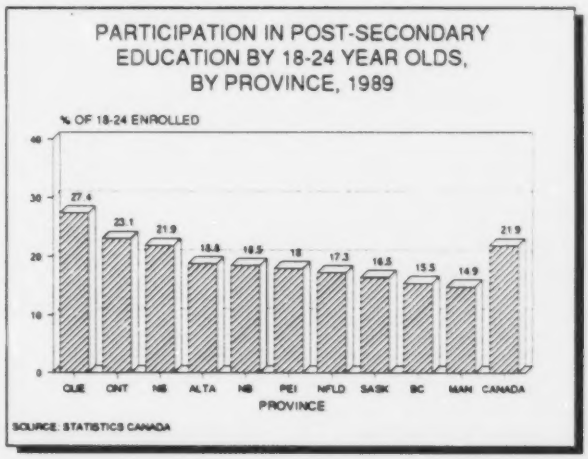
> students whose parents have lower education, or work in occupations traditionally perceived to have lower socio-economic status, are significantly under-represented among students entering post-secondary programs.

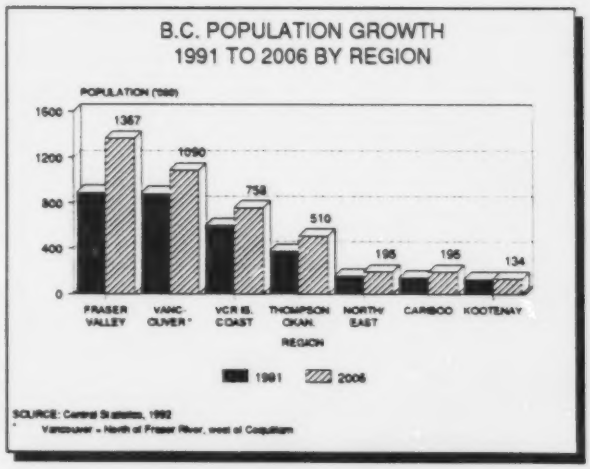
Enrolment Target for Equitable Access

The need to expand the College/Institute/Agency system is clear from the rapid increase in the number of qualified applicants who are unable to gain admittance to any post-secondary institution in their region, or who are admitted but find all the seats in their preferred field of studies are already taken. The question is the extent of the expansion, recognizing that the public purse is not bottomless and that British Columbians have other needs in addition to education. In other words, what is a responsible enrolment target in the present environment?

There are a number ways to go about determining a responsible enrolment target (population growth, participation rates, greater equity and balance). They all seem to lead to the same general conclusion. One way is to compare ourselves to how our provincial neighbours have approached the question of the number of students to be served - quite a reasonable approach in that they are facing the same economic, social, and human resource needs as British Columbia, not to mention similar financial constraints in the public sector.

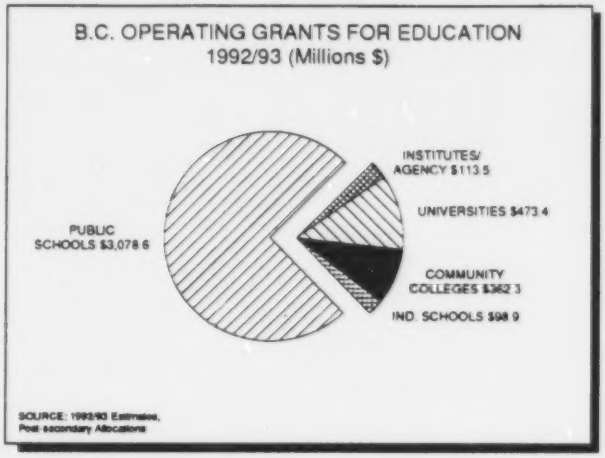
Compared to other Canadian provinces, British Columbia needs to expand its College/Institute/Agency system by about 33 percent just to raise it to the current national average. Clearly B.C. should aspire to more than merely the average level of access to post-secondary education for its citizens. British Columbia currently ranks ninth among the provinces, and just narrowly misses tenth place.





Provincial government demographers forecast that British Columbia's population will grow by a third over the next fifteen years - the equivalent of the entire population of Saskatchewan moving to British Columbia. Over the next five years, the population will grow by about ten percent. The most growth will occur in the middle aged population, a group with high and growing needs for upgrading and retraining in the light of rapid technological and other changes in the workplace.

Just using these two simple and conservative benchmarks, B.C. enrolment in the college sector needs to grow over the next five years by a minimum of 43 percent (= 33% + 10%) just to reach the Canadian average in terms of access. With a current enrolment of 65,000 Full-Time Equivalent (FTE) students, this means **growing by at least 28,000 FTEs (or 5,500 FTEs annually for each of the next five years).**



Is Annual Growth of 5,500 FTEs Realistic?

Is the enrolment target realistic in present circumstances? This question really has two components:

1. Is 5,500 FTE enough?

   The dramatic increases in applications, rejections of qualified applicants, and unsuccessful attempts of admitted students to register in desired (and even required) courses make it clear that there is no lack of demand. The full extent of this demand is hard to quantify precisely, but the gross data available to date is persuasive that demand outstrips the expansion proposed even in this Action Plan.

2. Can we afford not to do it?

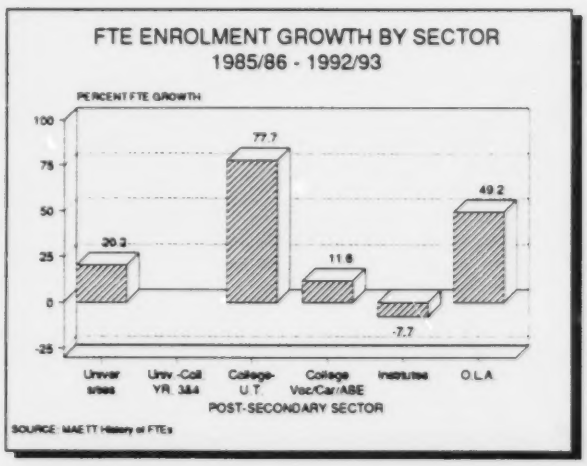
   The College/Institute/Agency sector is relatively small to start with, accounting for about one tenth of B.C.'s expenditures on education. A big expansion in percentage terms on a small base is still a modest expansion.

   The college sector has grown by an average of 2,000 FTEs annually for the last seven years. This was during a period when attention was focused on the school system by the Royal Commission on Education and on increasing access to university/academic programs. The target of 5,500 new FTEs annually is an increase of 3,000 over the present growth rate.

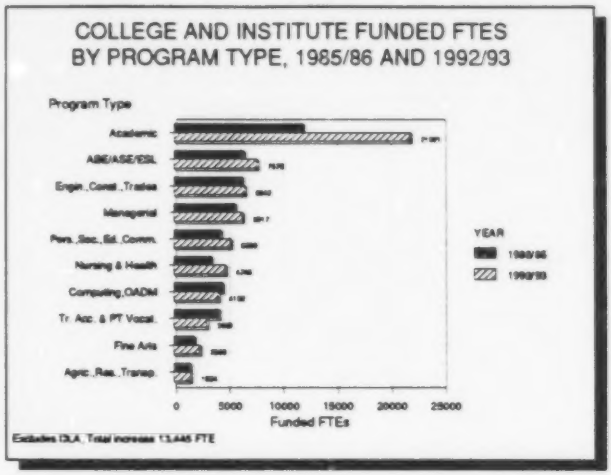
"My son is going into Grade 10. With the new entrance requirements, if he gets a C in even one subject in Grades 11 and 12, he won't be able to go to university. So he will be going to college. (Going to post-secondary education is not an option - in today's world, he has to go.) I'll be really ticked if he can't get into college either."

"Competition out there is tremendous. There's so many unemployed at this time that if you're not the best, and can prove that you've got the education and the knowledge...you're not going to get there."

"I don't want to transfer to UBC or UVIC. This is where I live...If I had lived somewhere else in the interior I would come here specifically because the housing and tuition are cheaper."



Expenditure data from other provinces suggest that British Columbia has an obligation to make this committment insofar as it currently lags in educational investment.



Priorities

An additional 28,000 FTEs over the next five years is a significant increase, but even with this expansion, not all needs can be met. Priorities have to be established.

The Access Task Force in this report does not attempt to set specific priorities. It is, however, convinced that there are three broad purposes which should receive priority treatment over the next five years:

Career/Technical and Vocational Education

Put bluntly, nonacademic education has been neglected over most of the past decade. Enrolments in many vocational and career fields have remained static or have even declined while those of some academic fields have skyrocketed. Employers are telling us that the province is starting to pay the price for this neglect.

Two illustrations of the consequences of this benign neglect are in the construction trades and in scientific fields.

Federal studies are predicting that in construction, high rates of retirement and the reluctance of young people to enter manual trades is expected to produce serious skilled bottlenecks during the next peak in the business cycle. Science and technology are drivers in the economy, yet British Columbia devotes relatively few of its resources to training its population in the application of technology.

While the majority of career, vocational and preparatory programs are vital and effective, some are not. Certain programs need their whole approach revamped; this happily has already started on a small scale. Thus in addition to expanding enrolment, government needs to send a strong signal that it values career and vocational education, and that it is committed to facilitating the curricular relevance of these fields of study.

Equity Groups

Post-secondary education has had some success in reducing barriers for equity groups, but much remains to be done. For example, the gender ratio is balanced in post-secondary education overall, but some fields are still gender ghettos.

Although, the Task Force did not look in detail at the groups which need to be better served, two groupings did come to its attention. There are undoubtedly other groupings to consider as well, but the following should be included in the priority listing:

<u>Multicultural Populations</u>

In the Lower Mainland, for example, about one in six residents use a language other than English at home. These are not all recent immigrants.

Persons With Disabilities

One in ten adults between the ages of 15 and 64 has a disability, about a quarter of whom have a severe disability.

Geographically "Disadvantaged" Regions

The access to colleges as measured by the number of seats in their local college per 1000 population varies widely. Some variation is justified, but greater equity is needed in the distribution of services around the province.

Upgrading/Retraining/Lifelong Education

Much has already been written about the middle aging of the population, the changing and broadening of occupational boundaries, the impact of technology in the shift to the information society and the global economy, and so on. What is significant for the purposes of this report is that the province is not educating sufficient numbers of mature learners. Also, this type of learner is typically not geographically mobile because of job and family commitments. Strategies must be adopted that bring education to the student in their local circumstances, and not ones which require students to adjust to institutions.

Fortunately, this client-centered educational philosophy is at the heart of the community college and agency system. Provincial Institutes, by definition, cannot provide the same geographical flexibility. The compensating strength of Institutes lies in their ability to provide customized training for specific occupational groups.

"I was working for a number of years as a secretary and found that I just couldn't get ahead. I wasn't making enough money, so I'm back in school."

"I'm here because I'm a single parent. I was a high school dropout, and I've come back to upgrade and to get on with life...to get a better job and to upgrade myself."

"Actually, it's a dream come true for me. When I was very young, straight out of high school...I went into nursing...I loved it, but I had to leave for personal reasons. I'm savouring my wisdom being back at school, and I guess I appreciate being here so much, to have the chance."

"One summer I worked at a job I really disliked. So after experiencing that I figured, well, if education would give me the choice...education just gives you freedom to do what you want and what you will enjoy."

"It's never ending. Technology leaves you behind...If you don't keep up with the rest of the world, what are you going to do?"

Respecting Local and Sectoral Diversity

The Task Force's recommendations include that the provincial government should adopt the policy of funding 5,500 additional FTE students in the College/Institute/Agency sector for each of the next five years, and that the primary beneficiaries of this expansion be: - Career/Technical and Vocational programs - equity groups, including those needing preparatory programs - students over age 25.

While the above policy is applicable to the entire province, implementation of this policy should be customized for each institution. Implementation planning should recognize that a primary strength of the College/Institute/Agency system is its ability to adapt to varying local needs and different client groups.

Conclusion

B.C.'s College/Institutes/Agency system serve the neglected majority of adult British Columbians and "meet them where they're at geographically or educationally": the two thirds of Grade 12 graduates who are not eligible for admission to BC universities, the 40 percent of students who do not even graduate from high school, and the 20 to 40 percent who fail basic standards of literacy and numeracy.

The college sector in North America has been the pre-eminent post-secondary agency of social integration. The College/Institute/Agency system serves the broadest range of socio-economic groups and is often the most accessible introduction to post-secondary education for equity groups.

Finally, the Colleges,Institutes, and Agencies are cost effective. Many of the programs/skill training employers say are needed are available only in Colleges, Institutes, or Agencies.

The College/Institute/Agency system also views itself as a partner with other providers of post-secondary education through such activities as the university transfer function of colleges and contract training for employers.

Recommendations

The Task Force strongly urges the provincial Ministry to establish far sighted goals for the College/Institute/Agency system. It believes that B.C. should be a national and international leader in post-secondary education; in the levels of access; the quality of training, and its relevance for the future. It is only by having those services available that our citizens will be able to fully participate and take advantage of the opportunities our future will offer.

The Access Tasks Force therefore recommends:

1. **The College/Institute/Agency system be expanded by 28,000 additional funded FTE spaces over the next five years (5,500 per year, or an average increase of approximately 7 percent).**

2. **Priority be given for the expansion of career/technical and vocational training programs experiencing high student and employer demand (shortages of qualified workers), and for the development of "new" programs to meet emerging employment training needs in such areas as Software Development, Manufacturing and Communications Technologies, Quality Processes, and others.**

3. **The distribution of additional FTE spaces to the community college system be made based on an enrolment growth allocation model which takes into account objective and measurable criteria such as: percent of the total provincial population living in the region; actual and projected population growth; the college's enrolment capacity relative to the provincial average number of FTE per 1000 population; and, the number and growth of grade 12 students enrolled in the region.**

4. **Greater emphasis be given to the support of programs providing higher level skills training in mathematics, science and computer literacy.**

5. **A proportion of the additional FTE spaces be designated for new and expanded programs to meet the needs of the disabled, special needs and the multicultural communities.**

6. **The College/Institute/Agency continue to develop mid and long term enrolment plans supported by enrolment demand information, demographic, labour market and employment data for the population they serve.**

I. INTRODUCTION

A. Backgound

In the Spring of 1992, the Advanced Education Council of British Columbia convened an Access Task Force to examine the demand and societal needs for access to the College/Institute/Agency system and to make proposals for addressing the strategic challenges posed by access issues.

This report summarizes the work of the Task Force and highlights some of the most significant social and economic issues facing British Columbians. We believe there is a vital contribution and role to be played by the College/Institute/Agency system in meeting our society's needs for skilled citizens through training for the 21st century.

In the new global economy, the single greatest challenge our society faces is to ensure that our citizens have the abilities and skills to continue competing in an increasingly technical and knowledge-based work environment, which is and will continue to be constantly changing. The institutions which make up the College/Institute/Agency system are uniquely able to provide the range of training and education services that will be necessary. The strength of our system is that it promotes lifelong learning as the means of adapting and succeeding in the everchanging workplace.

Canada and British Columbia today are at an economic crossroads. Our society's welfare and standard of living are at risk. During the past 30 years we have achieved one of the highest standards of living in the world. This has been largely possible thanks to our rich natural resources, close proximity to the vast United States economy, and our history of protection from international competition via tariffs and national policy barriers. Today and in the future, British Columbia and all of Canada face the prospect of competing with the rest of the world for economic prosperity. This prosperity and the maintenance of a high standard of living are dependent on continually increasing our productivity, through people skills and knowledge.

The provincial environment and the society our post-secondary education system is intended to serve is, and has been changing at a rapid rate for the past decade. Indicators of the significant changes occurring in the post-secondary environment are attracting the attention of the media, as well as political leaders and public administrators.

We believe these indicators point to compelling reasons for a significant increase in the province's public investment in the College/Institute/Agency system.

The cost of providing a high quality, time effective and cost effective educational system may appear to be high, but it pales in comparison to the cost of maintaining an educational system which does not meet the access needs of our society either in terms of quantity or quality.

The following are some of the key issues pointing to the urgent need for substantially expanded access to the College/Institute/Agency system.

B. Issues and Observations

> Large numbers of would-be students are being "turned-away" from obtaining post-secondary education and training in the College/Institute/Agency system.

> Employers are increasingly unable to find the skilled people they need to fill new positions in the labour market.

> Nearly two-thirds of new jobs created in the 1990's will require some post-secondary education, 40 percent will require four or more years of post-secondary training.

> Adult illiteracy and high school drop-out rates of 30-40 percent are unacceptably high, contribute to increased levels of economic dependency, and limit the individual's productive capacity and opportunities to participate fully in society.

> Post-secondary vocational programs which provide graduates with excellent employment and income earning potential are perceived as being held in low esteem by secondary school students and their parents.

> There are major social and economic implications of continuing technological change, which are being felt in all sectors of our provincial economy.

> New and increased efforts are being made to bring into the post-secondary education system groups that have been historically disadvantaged by a lack of equity and fairness in access to our institutions of adult learning.

> There is a growing need to provide retraining for the expanding mid-life population cohort. The changing needs of the labour market are making this essential. The College/Institute/Agency system has proven effective in providing this upgrading.

> There is greater recognition on the part of high school graduates that they need to obtain some post-secondary education and training for new or existing jobs.

> A majority of these high school graduates require career employment training, and are college rather than university bound.

> Large numbers of immigrants are bringing career skills which can be used when an appropriate combination or English language education and training in North American technical methods (e.g.. Nursing) is provided. Colleges are especially effective in creating and delivering these kinds of programs.

> Generally speaking, the College/Institute/Agency system is not well known by the public at large or by the business community.

This document identifies these symptoms and other indicators, highlights the related economic and social needs of British Columbians, and identifies the unique contributions which can be made by the College/Institute/Agency system to our society's future. In order to help ensure the College/Institute/Agency system is able to fulfill its potential for helping individuals to achieve their goals, and for society to meet the many challenges it faces, a cooperative effort on the part of these institutions, the provincial government, employers and the public school system is essential.

In order to make possible the levels of government support required in these times of restraint, it is essential that the public generally know and appreciate the contributions these institutions make and how limited access is, at present, in relation to the demand and need.

To maintain or improve our society's standard of living, and to share more equitably among our citizenry the wealth and opportunities available, we must increase our productivity and quicken our rates of adaptation to change. This can only occur if new, innovative and comprehensive actions are taken by our public schools and post-secondary education systems to improve the quantity and quality of access to education and training services.

The College/Institute/Agency system provides some of the tools for solving the complex problems arising from changing demographic, economic, employment and social issues.

C. Conclusions and Recommendations

On all accounts, whether it be by the number of students served, the employment rates of occupational program graduates, enrolment demand for academic programs, student satisfaction, or institutional efficiency measures, one can and must conclude that the College/Institute/Agency system in British Columbia is very successful.

It is also evident that the community colleges have truly democratized access to the post-secondary education system. This is illustrated by the heterogeneous nature of the populations they serve:

> ages that range from 17 years to senior citizens;

> recent high school graduates pursuing academic, career and vocational training;

> university graduates seeking applied education

> employed workers engaged in skills upgrading for current or new positions;

> women wishing to enter or re-enter the workforce;

> early secondary school leavers (drop-outs) upgrading their academic and life skills;

> a higher proportion of part-time students than universities;

> the disabled gaining skills for independent and satisfying living, at home and in the workplace; and,

> displaced employees gaining either higher level skills or an entirely new set of skills to enable them to re-enter the workforce in different roles.

One must also conclude that given the large and growing numbers of students being turned-away and the long waitlists for Career, Vocational and Adult Basic Education programs their success has far exceeded the spaces and operating resources available.

There is a clear and urgent need to expand the public investment in the College/Institute/Agency system of British Columbia.

This need is driven principally by the following factors:

> Currently the post-secondary participation rate of young adults in British Columbia ranks ninth of the ten provinces in Canada and is approximately 75 percent the national average rate.

> The population of British Columbia is growing faster than any other province in Canada. The College/Institute/Agency system must grow by two percent per year (or 1,300 FTE), merely to keep pace with our increasing population.

> Unless access to adult training and educational opportunities is significantly improved, British Columbians will be unable to compete on an equal basis with other Canadians and the citizens of other countries for employment in the changing labour market.

> The nature of the British Columbia economy, with its historically heavy dependency on primary industries and natural resources, in the face of the industrialized world's movement to a knowledge and information based economy places us at risk of a declining standard of living. Our citizens must become better trained and educated.

> Retraining and skills upgrading is, and will continue to be critical in order to maintain or improve the viability of our provincial workforce and economy in the face of rapid changes occurring in the application of technology. Structural unemployment will challenge our productivity and social institutions until we adjust and diversify our economic driver industries.

> Great regional disparities and inequities exist within the province in the levels of access to community college facilities and programs. Levels of access to college educational and training opportunities in regions where local enrolment capacities are below the provincial average must be raised to at least the average level as soon as possible.

> The continuing influx of new Canadians to British Columbia is dramatically increasing pressure on the post-secondary system to provide English as a Second Language, Adult Basic Education and Career and Vocational Training. If these people are to be effectively integrated into our province's society and become productive and contented citizens, the public post-secondary education system must have the capacity to provide access to them.

> In recent years, growth in funding for academic educational programs compared to career, vocational and adult basic education programs has become seriously unbalanced. Our society's and labour market's needs for workers with technical, trades and other occupational skills have not been well served by this growing imbalance in opportunities available within the College/Institute/Agency system. It is imperative that greater balance between applied and academic programs in the system be restored.

> Unmet enrolment demand, and the numbers of would be students "turned-away" from our institutions of adult learning are growing at an alarming rate, as more and more young people realizing the importance of a post-secondary education and training for employment are seeking to enroll.

These factors all point to the critical need to establish mid and long terms plans for ensuring that British Columbia's College/Institute/Agency system has the capacity to provide our people with the skills and knowledge they will need in the 21st century.

We believe that given the:

> **well established economic and social trends that threaten our society's prosperity and standard of living;**

> **demonstrated success of the College/Institute/Agency system;**

> **its low per capita funding as compared to the public school and university system;**

> **the fact that the College/Institute/Agency system must presently meet the post-secondary needs of a vast majority British Columbia's high school graduates (two-thirds of whom are ineligible for direct university admission); and,**

> **that it is known that present and future day employment requires skills training available which is and most effectively delivered through these institutions,**

The College/Institute/Agency system must receive unprecedented attention and public funding support during the next five year period.

It is therefore recommended that:

1. The College/Institute/Agency system be expanded by 28,000 additional funded FTE spaces over the next five years (5,500 per year, or an average increase of approximately 7 percent).

2. Priority be given for the expansion of career/technical and vocational training programs experiencing high student and employer demand (shortages of qualified workers), and for the development of "new" programs to meet emerging employment training needs in such areas as Software Development, Manufacturing and Communications Technologies, Quality Processes, and others.

3. The distribution of additional FTE spaces to the community colleges be made based on an enrolment growth allocation model which takes into account objective and measurable criteria such as: percent of the total provincial population living in the region; actual and projected population growth; the college's enrolment capacity relative to the provincial average number of FTE per 1000 population; and, the number and growth of grade 12 students enrolled in the region.

4. Greater emphasis be given to the support of programs providing higher level skills training in mathematics, science and computer literacy.

5. A proportion of the additional FTE spaces be designated for new and expanded programs to meet the needs of the disabled, special needs and the multicultural communities.

6. The Colleges continue to develop mid and long term enrolment plans supported by enrolment demand information, demographic, labour market and employment data for the regions they serve.

II. SCAN OF THE ECONOMIC AND SOCIAL ENVIRONMENT

A. Economic Realities and the Need for Retraining

Labour Market

Profound economic changes have occurred in recent years. While it is not necessary to describe in detail these changes here, several of their implications which are most relevant and significant for post-secondary education and training needs will be noted.

Technological improvements in manufacturing, communication and transportation have globalized the world economy and market place. Automation and increased use of technology is being felt throughout business and industry. The need for unskilled labour in manufacturing and construction industries has been largely eliminated, while the demand for workers skilled in trades and technologies has increased dramatically.

> If we are to maintain a high quality of life and standard of living, productivity will be the key. Productivity has traditionally been defined as the value of output produced by a day (or hour) of work or a dollar of capital investment. In the long run, productivity determines the standard of living by setting wages, profit, and ultimately the resources available to meet our ever-increasing social demands. To sustain productivity growth, our economy must continue to upgrade itself. We must relentlessly pursue greater productivity and quality of existing industries by improving our products, utilizing more efficient production processes and migrating into more sophisticated and higher value industry segments. We must also be able to compete in entirely new industries.
>
> The capacity of our economy to upgrade will depend on our underlying structural and institutional characteristics, the viability of our workforce, our infrastructure, our post-secondary institutions and our public policies. (AECBC, G. Johnson, June 1992)

Polarized Job Market

While a large portion of the new jobs will be high-skill, there will also be a polarization in the job market with significant numbers of low-skill, low-wage jobs for which short term, specific training will be required.

Increasing Skill Requirements

Technological change and the forces that attend globalization are placing a premium on highly skilled workers - from both academic and technical backgrounds. The skill requirements for most existing jobs are also increasing.

Literacy, numeracy and technical skills remain the basic building blocks of an increasingly technologically based workforce, and jobs with high skill and educational requirements continue to grow at a faster than average rate. This trend is expected to intensify as economic activity responds to global competitive pressures and becomes increasingly knowledge-based. For example, the demand for financial managers, electrical engineers, engineering technologists and technicians, high-tech trades personnel, systems analysts and computer programmers will be strong. There will be relatively low demand for semi-skilled and unskilled production related occupations.

Specialized and technical skills often count for little if the employee is not well grounded in basic workplace skills.

A number of studies have described the high importance employers place on basic skills such as literacy and interpersonal communication, as well as workplace values and attitudes. One such study was a "blue ribbon" panel struck in the early 1980's in the USA under the auspices of the National Academy of Sciences. Its focus was on secondary school education, but the chapter describing the sort of worker who will prosper in the future applies equally well to graduates of post-secondary education. Subsequent studies in the USA and Canada have confirmed its findings.

The panel attempted to project the future of the American job market to determine the sort of worker who will prosper in the future. It has asked its employer members to describe the employees they will need, and be able to employ, in the years ahead. A single answer comes from both sources: a person who is able and willing to learn throughout a working lifetime.

A person who knows how to learn is one well grounded in fundamental knowledge and who has mastered concepts and skills that create an intellectual framework to which new knowledge can be added. *(High Schools and the Changing Workplace: the Employers View*, National Academy Press, 1984.)

The panel identified the following competencies as core, saying that they are transferable, vital to almost every job except the least skilled, and essential to upward mobility and adaptability:

- command of the English language
- reasoning and problem solving skills
- reading
- writing
- computation
- science and technology (comfort and confidence with technology)
- oral communication
- interpersonal skills
- social and economic knowledge
- personal work habits and attitudes.

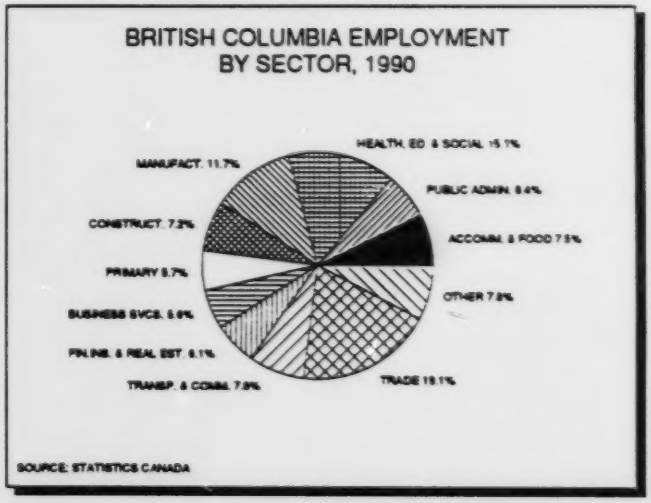
Half of BC's jobs fall into one of four categories.

Thirty occupations will account for almost half the jobs in BC in 1995. Of these, over half (i.e. one third) will fall into one of what Employment and Immigration Canada calls the "four pillars" of the BC job market:

1. Selling - ranging from sales clerks to top sales management positions
2. Information based jobs - including communications, office, clerical and computer positions
3. Finance
4. Tourism and Food - including restaurants.

British Columbia Employment by Sector, 1990

The shift in employment between the service-producing and goods-producing sectors affected the regional distribution of employment. Between 1980 and 1990, the Lower Mainland's share of provincial employment rose from 57.5 per cent to 59.6 per cent, Vancouver Island's share declined slightly from 16.8 per cent to 16.7 per cent, while the rest of the province dropped from 25.7 per cent to 23.7 per cent. This shift reflects the relatively greater reliance of the outlying regions of the province on goods-producing industries. During 1990, employment in British Columbia increased 2.4 per cent, exceeding the Canadian growth rate of 0.7 per cent.



Most jobs in the future will not be the glamorous "new" jobs, but variations of existing jobs.

Emerging new occupations typically require high levels of post-secondary training, but they will constitute only a tiny fraction of the entire labour market. Most jobs for the next decade already exist. The largest of these existing occupations typically require the kind of training that is provided at community colleges and institutes.

Occupations Contribution Most to Employment Growth

It is difficult to predict the long range effects that competitive and technological forces may have on employment in various occupations. However, the occupations which are presently among the largest in total employment are expected to continue to be the major source of new jobs over the next decade.

Job boundaries are broadening and blurring. Employees will need to be flexible.

A number of changes are occurring in the work place:

Functional Flexibility

The trend is for a broader range of skill competencies to be associated with a job so that a broader range of tasks can be performed. The causes include a blurring of skill boundaries due to technological change, a smaller work force having to cover the same range of tasks due to cost saving pressures, and a changing environment. With accelerating technological developments, the content and skill mix of existing occupations will change.

Decentralization

Employees of many large corporations may find themselves working in smaller units and participating more in decision making, just as their counterparts in small businesses have done.

Erratic Work Histories of Employees

Rather than a steady and secure career, individuals must develop the ability to change, to learn new skills, to be self-motivating and to find their own paths in a lively and unpredictable environment. Major shifts and changes in the work place will be frequent.

Information

The information age will emphasize knowledge, and intellectual and coping skills. The largest and fastest growing part of the service sector, itself growing more rapidly than the resource and manufacturing sectors, is the information economy.

Rate of Technological Change

The rate of change in the global economy will remain rapid and may even accelerate.

Responsiveness

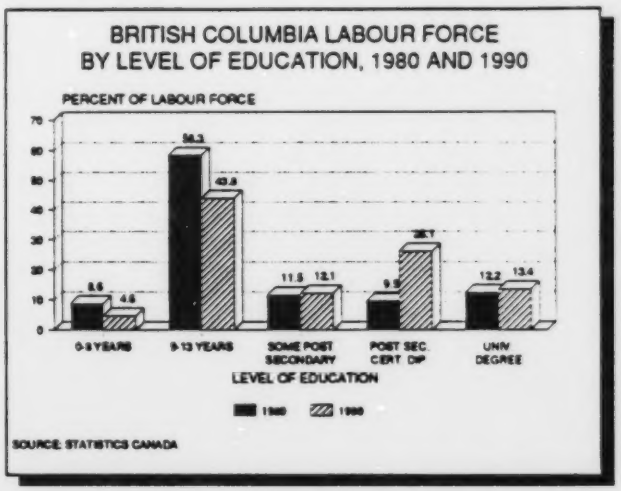
Innovativeness resides not only in new hardware but also in flexible, participative and responsive organizations. While most employers continue to function according to traditional principles, examples of flexible working-time arrangements, job redesign, and even sociotechnical systems are increasing.

British Columbia Labour Force by Level of Education

Employment:

Over the past 10 years, the service-producing sector of the British Columbia economy has grown more rapidly than the goods-producing sector, reflecting the trend in Canada and other developed countries. Between 1980 and 1990, employment in the province's service sector increased from 860,000 to 1,108,000, a gain of 248,000 jobs or 28.8 per cent. In contrast, goods-producing employment increased marginally from 352,000 in 1980 to 361,000 in 1990, an increase of only 9,000 or 2.6 per cent. As a result, the service-producing sector's share of total employment rose from 70.9 per cent to 75.4 per cent over this period.

Employment/Population Ratio by Level of Schooling B.C. in April 1992	
Educational Attainment	**Percent Working**
0 - 8 years	26%
Some secondary school	43%
High school graduation	64%
Some post-secondary	66%
Post-secondary certificate or diploma	67%
University degree	75%
Statistics Canada 71-001, April '92, B-18	



The more educated a person, the greater the chance that she or he will participate in the labour force. The combination of a desire to work in paid employment (labour force participation rate) combined with the actual success in obtaining work (unemployment rate) results in the employment/population ratio. This ratio shows that only one quarter of adult British Columbians with Grade 8 or lower education are working at present, compared to three quarters of those with a university degree.

In 1990, 51.6 percent of B.C.'s the labour force had attended or had graduated from a post-secondary institute, compared with 33.2 percent in 1980. The proportion of those in the work force who had completed some type of post-secondary education - university degree, college certificate or diploma, or trade certificate - rose from 21.7 per cent to 39.5 per cent during this period.

Educational Attainment of Labour Force Entrants

The educational attainment of the Canadian population continues to rise. The proportion of the labour force with education beyond high school has risen to 42 per cent in 1989, and is expected to exceed 50 per cent in 1992. Over the same period, the proportion with eight years of schooling or less has fallen from 17 per cent to 9 per cent. Individuals with a university degree now account for 15 per cent of the labour force, up from 10 per cent in 1979.

Despite this, there is a growing mismatch between the skills and qualifications needed for the work that is available and the skills of those available to work. Two important contributing factors are the rapid rise in skill requirements of many jobs due to the introduction of new technologies and the changing occupational mix in various sectors of the economy.

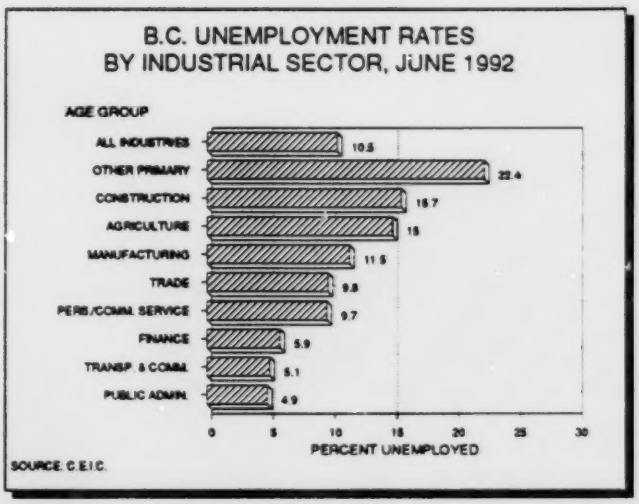
More education reduces an individual's risk of unemployment.

The figures fluctuate, but the general pattern remains unchanged: the least educated segment of the population experiences the highest rate of unemployment. In April 1992, the unemployment rate in BC for workers with only some secondary school education was 19 percent, compared to 11 percent for high school graduates. Only 7 percent of workers with some post-secondary education were unemployed.

In the increasingly competitive, technological environment of the future, it will be crucial for British Columbians to have opportunities to increase their knowledge and skills on a continuous basis. Further, special efforts must be made to close the knowledge and skills gaps between disadvantaged groups and the population in general.

Access to and successful achievement in higher education are critical in attaining one element of individual potential - employability. For each year of education past high school, unemployment rates decrease by about 1.3%. In addition, median annual earnings increase by about $3000, while net fiscal contribution - the difference between taxes paid and benefits received - rises by an average of $900.

Structural unemployment (the mismatch between workers' skills and available jobs) is a growing concern. The solution is upgrading and retraining.



One aspect of unemployment which historically has received considerable attention is "cyclical" unemployment: the manner in which employment levels fluctuate according to the strength of the economy. Governments have sought to stimulate the economy during periods of downturn through monetary and fiscal policy to counteract high unemployment.

During the 1980's, the observation that a large number of job vacancies, and even skill shortages, co-existing with high levels of unemployment led to more intense examination of the "structural" aspects of unemployment. The Economic Council of Canada concluded in 1990 (page 11 of Au Courant, vol 10, no 4) that:

> ....the current high unemployment rates are due primarily to a variety of "structural" factors connected with the labour market. The effect of these factors is to create a widening divergence between the requirements of job vacancies and workers' job characteristics.

It went on to say:

> But in order to attack the mismatching problem at its roots, Canada will have to focus on programs and policies that are geared to helping workers move from one kind of industry and/or occupation to another. Thus these policies must be attuned to the needs of the region, or even the community.
>
> With respect to retraining as a solution to unemployment, the Canadian Labour Market and Productivity had previously concluded that the case for making training and education a priority in addressing current labour market problems was "overwhelming". (*"The Changing Nature of the Canadian Labour Market: The Increased Importance of Education and Training"*, Quarterly Labour Market and Productivity Review, Winter 1988, p. 23).

The Economic Council also holds the view that a response to structural unemployment needs to reflect the needs of the local community:

> Manpower training can, in principle, alleviate the joblessness that is caused by deficient skills. Here, our analysis suggests that programs must, in practice, be highly adaptable to rapidly changing circumstances and targeted at the requirements of local labour markets. It is not just that technological advance is hastening skill obsolescence; the nature and destination of the clientele are also changing. For example, the special needs of older workers are assuming greater importance, while the special needs of the expanding service sector demand a reorientation of the more traditional, craft-oriented programs. For older workers with lower levels of educational attainment, in

particular, literacy or remedial education programs may be needed before fresh vocational skills can be acquired. (*Back to Basics*, 25th Annual Review of the Economic Council of Canada, 1988, p. 40.)

Middle-Aging of the Labour Force

Given the maturing of the Canadian population, middle-aged and older Canadians will constitute an increasing proportion of the population and labour force over the next decade. While in 1986, 49 per cent of the labour force was over 34 years of age, this figure will reach 60 per cent by the year 2000.

With a smaller proportion of youth in the labour force in the future, older workers are more likely to feel the effects of economic adjustments than in the past, requiring them to demonstrate greater flexibility and adaptability.

With the number of youth entering the workforce continuing to decrease until the late 1990s, the existing labour force and expected increased in immigration will be called on to respond to future skill demands. As a result, training and retraining of middle-aged and older workers will become critical.

High School Dropouts

As discussion is heightened over the link between Canada's global competitiveness and the need for a well educated, trained workforce, the dropout rate of secondary school students has become a concern.

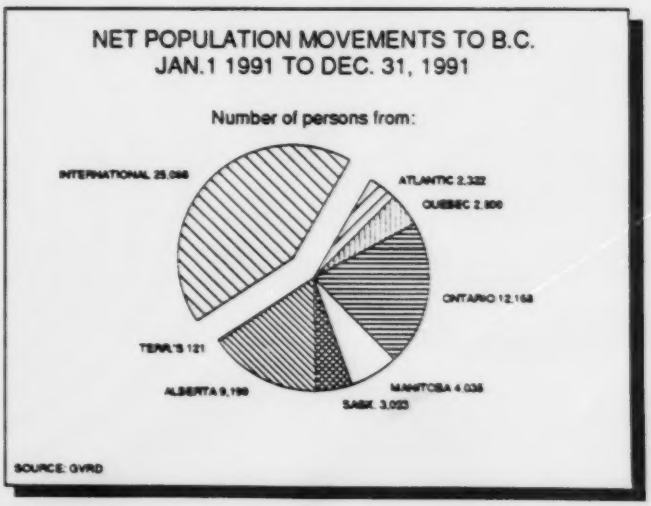
From a high of 38 per cent in 1978-79, the dropout rate showed a steady decline to 28 per cent in 1983-84, but increased to 33 per cent by 1987-88. While there are some methodological difficulties involved in calculating actual dropouts from the school system, this rate represents a potential 125,000 high school students each year, or a possible one and one-quarter million youth over the next ten years.

Since high school dropouts tend to have lower levels of basic literacy/numeracy skills, their prospects for finding stable employment are very much restricted.

B. Social Characteristics and Equity Groups

Multicultural Population

There have been substantial shifts in the pattern of immigration to Canada as a result of global economic developments and population movements over the past few years. Most of Canada's new immigrants now come from Asia rather than Europe, and this trend is expected to continue in the future. The changing composition of the Canadian population enhances the social and cultural diversity of the country, but will increasingly force Canadians to re-examine issues such as racism, language, and the rights of ethnic groups to preserve their traditional cultures and values.



Colleges located within local communities have been a potent instrument of social integration

Growth in the pluralistic nature of B.C.'s Lower Mainland is not a temporary phenomenon. The provision of multicultural educational programs can no longer be perceived as an adjunct to mainstream programs.

British Columbia is expected to be the destination of 14 percent of Canada's 250,000 annual immigration i.e. about 35,000 annually will come to BC. The Lower Mainland has consistently attracted a large and growing proportion of BC immigrants; 70 to 80 percent of international immigrants to BC settle in the Lower Mainland. In 1986, 20 percent of the Lower Mainland's population (over 300,000 people) were born in countries other than Canada, USA, or the United Kingdom.

Asian immigrants continue to be the largest group immigrating to BC, constituting 70 percent of the total. They are especially likely to settle in the Lower Mainland.

Approximately half of the Lower Mainland's immigrants cannot speak English when they arrive. About one in six of all Lower Mainland residents - not just recent immigrants - use a language other than English at home.

The recent immigrant population has more extremes in educational attainment than the nonimmigrant population.

The immigrant population has a larger proportion of the poorly educated than the nonimmigrant population, but a similar proportion who are highly educated.

Highest Level of Schooling

Percent Distribution

Canada 1986

	Nonimmigrants	Immigrated between 1983-1986
Less than Grade 9	9%	19%
Grades 9-13		
Without certificate	31%	22%
With certificate	12%	11%
Subtotal	43%	33%
Trades Certificate	3%	0%
Nonuniversity only		
Without certificate	8%	6%
With certificate	16%	11%
Subtotal	24%	17%
University		
Without certificate	11%	24%
With certificate	9%	16%
Subtotal	20%	30%

Statistics Canada, 93-155

In the Lower Mainland, similar proportions of the immigrant and nonimmigrant population have post-secondary degrees of diplomas: in the 20-25 percent range. Lower Mainland immigrants have slightly higher educational attainment than immigrants living elsewhere.

The 1986 census compared the adult population across Canada which had immigrated within the previous three years to the adult nonimmigrant population. It found more extremes in educational attainment:

The big difference is at the lower end of the educational spectrum: about 20 percent of immigrants have less than Grade 9, compared to 8 percent of nonimmigrants. Roughly half the immigrant population have a high school diploma. This has been a fairly stable proportion for some time now.

Educational Attainment of Persons with Disabilities

One out of seven British Columbians has a disability. The World Health Organization defines a disability in adults as any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being. Using this definition, about one in seven people in BC has a disability.

The proportion of the population with a disability increases with age. About one in 20 children in BC has a disability. One in 10 adults between the ages of 15 and 64 has a disability, and nearly half of all seniors.

Two thirds of the disabilities concern mobility:

66%	Mobility
32%	Hearing
30%	Psychiatric or developmental delay
18%	Visual
8%	Speaking

The disabled population is under-represented in the labour force.

Only 40 percent of disabled adults participate in the paid labour force, compared with 70 percent of adults without a disability. In Canada, it is estimated that 19 percent of individuals living in low income households in 1986 were disabled persons. (Statistics Canada: A Profile of Persons with Disabilities in Canada, 1990)

The disabled population is under-represented at BC colleges.

> "It appears that students with disabilities represent only about 5 percent of the college/institute population, even though approximately 13 percent of the population of British Columbia have a disability. Many students are not gaining access, and services are often inadequate for those who do."

(*Adult Special Education Review Project, Feb 1991 Draft*, Ministry of Advanced Education and Job Training.)

Educational Institutions are more involved with people with disabilities than ever before.

Since 1982, the general school population, kindergarten to Grade 12, grew by 10 percent, while the special education category increased by 60 percent. Government policies, legislation, the work of advocacy groups, public awareness and students themselves are all creating a demand for much greater involvement by the disabled population in post-secondary education.

An Adult Special Education Policy Task Force at Douglas College reported in July 1991 that:

> Legislation, including the Charter, as well as increased advocacy, mean that any practices that are seen as restricting access can be challenged in court. In the United States, when students with disabilities have taken colleges to court, they generally have won.

C. Population and Demographic Imperatives

Total Population

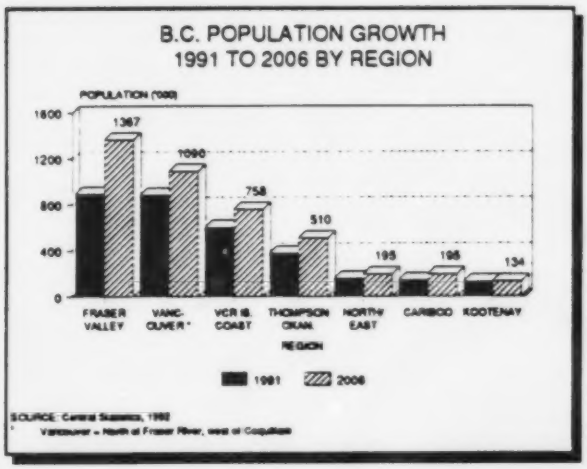
The BC population will grow by one third over the next 15 years.

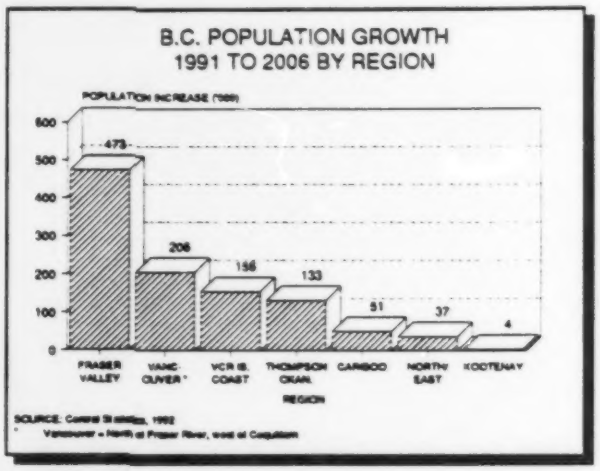
The BC population will increase by one million people in the next decade and a half. This increase is roughly the current total population of Saskatchewan.

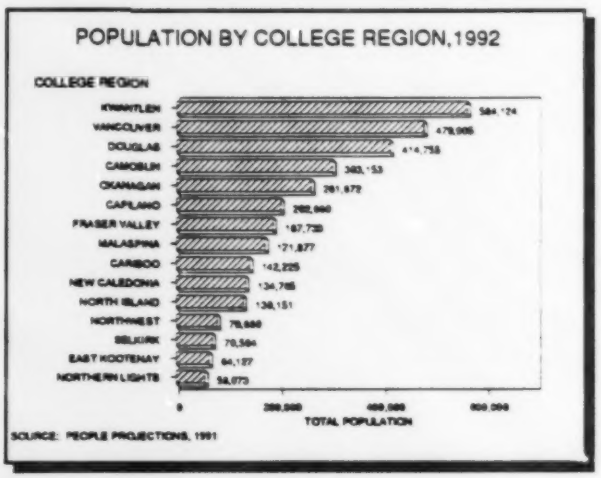
Two thirds of the growth (680,000 people) will occur in the southwest mainland.

This is roughly equivalent to the entire population of Winnipeg moving to Greater Vancouver over the next 15 years.

Most British Columbians will live in urban areas in 2006.







Population Growth by Age Group

All age groups of the population are growing, but especially the middle aged group.

Age Group	Growth (1990-2005)
18 - 24	18%
25 - 44	11%
45 - 64	69%
65+	49%

The message is mild growth in the young adult population, huge growth in the middle population, and also significant growth in the senior population.

Setting aside any effects of a rising participation rate (i.e. increased propensity for the population to seek post-secondary education), the demographic trends suggest an increase in demand from recent high school leavers and a huge increase in the demand from middle-aged persons in the Lower Mainland and Southern Vancouver Island.

School Age Population

Grade 12 enrolments will grow by one third over the next decade

The BC Ministry of Education's Grade 12 public school enrolment projections (made in 1991/92) are as follows:

	1991 Enrolment	Growth by 2001
Vancouver Island	7,050	30%
Lower Mainland	18,700	37%
Interior	10,800	14%
Total BC	36,550	29%

As recent high school leavers are the main source of post-secondary enrolment, demand for admission to colleges and institutes will continue to grow.

Approximately 40 percent of high school students do not graduate.

Approximately 60 percent of Grade 8 students reach Grade 12 and graduate within five years of Grade 8 enrolment. Much of this attrition occurs in Grade 12, with graduates representing only 70 percent of Sept 30 Grade 12 enrolment. (Ministry of Education, Statistical Supplement to the Annual Report 1989/90).

The need for Adult Basic Education programs in colleges and at the workplace is therefore huge.

Two thirds of Grade 12 graduates are not eligible for admission to a BC university.

University eligibility is determined by grades and having completed specified high school courses. Provincially, only 32 percent of Grade 12 students were admissible at the point of graduation to at least one BC university in 1989. The proportion that is admissible has likely declined in the past year as universities raise their entrance standards for Fall 92 in response to limited capacity due to financial restraint.

Eligibility rates vary according to school and region. The regions with the highest rates of eligibility are:

North Shore	50%
Vancouver City	44%
Fraser Valley	30%
Greater Victoria	40%

Eligibility rates in Northern BC, the Interior and the Kootenays average 25 percent.

(Source: BC Link File, Oct. 90)

Aging Population

Persons aged 45 years and over will constitute 43 percent of the BC population in twenty years, up from the current 33 percent.

Upgrading opportunities need to be available locally for the growing number of mid career employees.

The need for life long education and skill upgrading has been well documented and accepted. The aging of the population will compound the effect of technological change and job redefinition, resulting in a huge need for skill upgrading.

Mid career employees to find it difficult and expensive to relocate for even a period of a few days to return to formal education. (Family responsibilities are a prime constraint.) To the extent that training can be delivered locally using existing infrastructure, participation in, and the cost effectiveness of, lifelong education will improve.

Some skilled occupations will experience labour force shortages due to a high number of retirements, low student demand and a declining ability to recruit successfully from abroad.

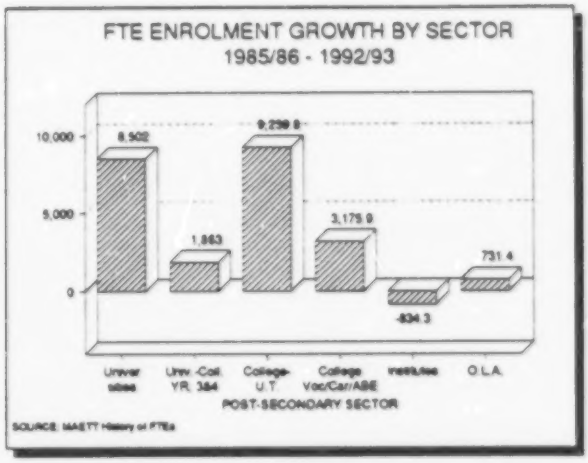
Some trades and technical fields are faced with both a small number of seats (relative to academic programs) in educational institutions and small student demand. For example, apprenticeship education enrolment in Canada reached a 20-year low in 1987/88, down a third from five years earlier. Yet employers are having difficulty hiring skilled workers in some fields.

A traditional solution to shortages in a number of occupations has been immigration. Horticulture, for example, benefitted from an influx of European trained personnel who came to Canada in the 1950-s - a group which is now retirement aged.

In examining the construction industry, the Canadian Labour Market and Productivity Centre concluded in 1990 (Labour Migration in Construction Occupations) that the higher rate of retirement and the reluctance of young people to enter manual trades is expected to produce serious skilled bottlenecks during the next peak in the business cycle. Given that a number of other countries now have standards of living equal or greater than those of Canada and the USA, the Centre found evidence that immigration as a source for skilled construction work will drop in significance.

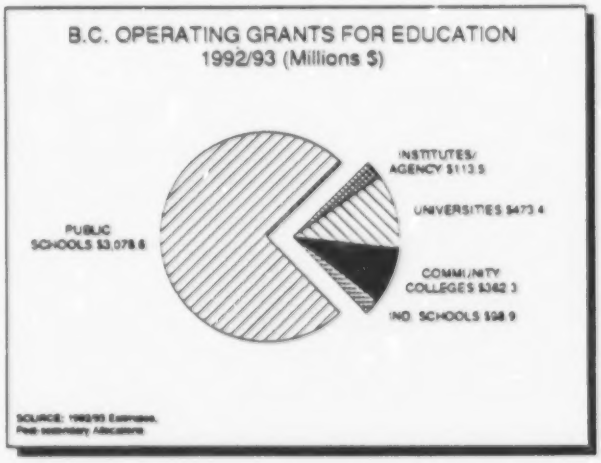
A. Enrolment and Funding

Enrolment Growth, 1985/86 to 1992/93



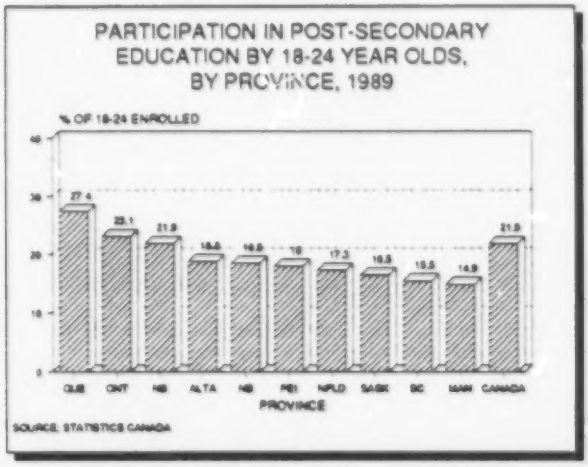
During the past seven years the B.C. post-secondary system has grown by 22,678 FTE funded students. The College/Institute/Agency system received 14,175 FTE or 62 percent of the total increase in funded enrolment.

Public Expenditures

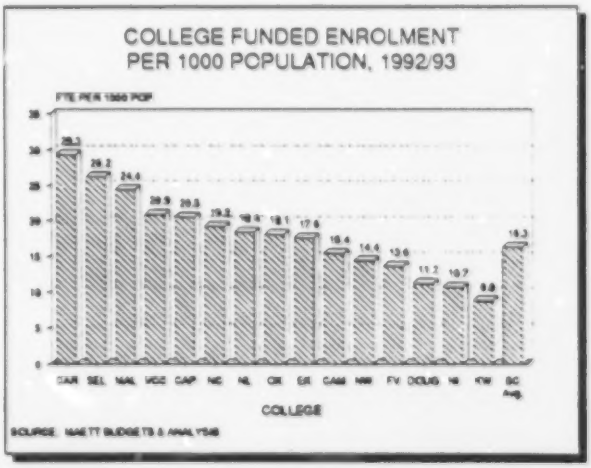


In 1992/93 B.C. will spend $475.8 million on the College/ Institute/Agency system. This amount is approximately the same as the total expenditures on universities ($473.4 million) but pales in comparison to public expenditures on elementary and secondary schools ($3.2 billion).

B. Access and Accountability



The post-secondary participation rate of young adults in B.C. ranks 9th of the 10 provinces, and is 71% of the national average.



Great disparities exist among the levels of access to college programs available in various regions of B.C. Citizens living in the Fraser Valley and Northern Vancouver Island currently have the least access to their local colleges.

Demand Pressures on the System

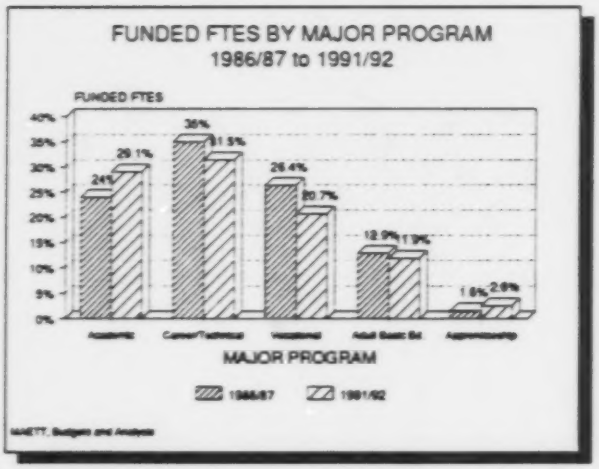
A combination of factors has placed very high student demand pressures on the British Columbia post-secondary system. These include demand pressures which are pushing B.C.'s participation rates up toward the national average, demands stemming from B.C.'s unique position of experiencing slight gains in its 18-24 population (while other provinces are seeing declines), and the increasing pressures from older people returning to the post-secondary system for further study.

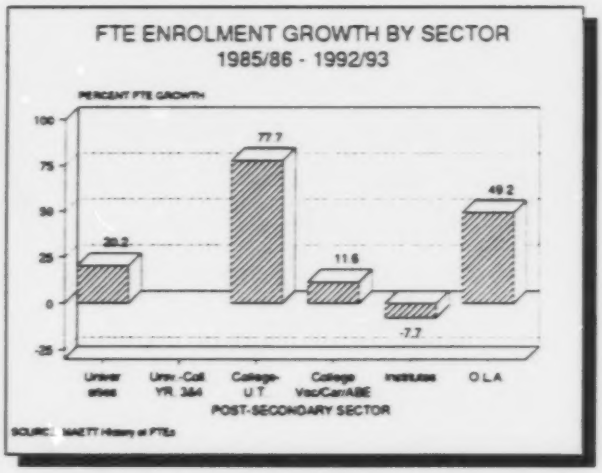
Need for Further Expansion and Diversification

Both students and workers, as clients of the knowledge and skill development system, are becoming more aware of the need for education and training in order to achieve their individual potential. This has resulted in burgeoning growth and diversification in the demand for relevant, high quality programs and services. This demand will continue to grow in response to a number of factors: the knowledge requirements necessary to sustain competitive advantage; the shift to lifelong learning, with education and training occurring throughout all stages of life; and the need to expand the opportunities for all under-represented groups.

C. Balancing Program Mix

Lack of growth in the non-academic program category during the past seven years has caused a significant shift in the program category balance in the College/Institute/Agency system.





IV. STRATEGIC ISSUES AND PLANNING PRINCIPLES

The following are some of the key issues and planning principles that must be addressed by both College/Institute/Agency system institutions and the Ministry of Advanced Education, Training and Technology during development of new plans for meeting the post-secondary access needs of British Columbians.

A. Local Delivery

> The local delivery of post-secondary education is fundamental to improving equity, fairness and balance in access to training services in the province. Economic and social barriers to accessing post-secondary education can only be minimized if the need for relocation or commuting long distances is not required.

B. Lifelong Learning

> On the-job-training, skills upgrading and training of employed workers for new or changing careers must become an even greater focus of the College/Institute/Agency system.

> Continuing and community education programs will continue to play an important part in helping our citizens to renew and upgrade their learning. For many people reentry to the post-secondary education system begins through non-credit activities.

C. An Underserved Majority

> A majority of British Columbia's population is currently not well served in terms of access to post-secondary education and training. This majority includes: 66 percent of secondary school graduates who are ineligible for university entrance and must therefore compete for scarce space in the College/Institute/Agency system; the vast majority of the work force for whom a university degree is not necessary but for whom career and vocational skills upgrading is an essential requirement; and, the enormous number of new immigrants who require English language training and Adult Basic Education.

D. Demographic Change

> The populations of all regions of British Columbia are changing. The nature of these changes will determine the local impacts on post-secondary institutions both in terms of the nature of the programs required and the levels of expanded access that will be needed.

> Overall the provincial population is both aging and growing significantly through immigration and natural increase, however the greatest increases in population will be experienced in a few college regions. The provincial trend of slightly increasing young adult population is being primarily driven by the South Fraser Valley where the rate of growth among the 18-24 year age population is three times the provincial average. This factor alone will increase the demand for post-secondary access in these regions above the provincial rate of growth.

E. Career/Technical and Vocational Program Revitalization

> There is a clear need for greater access to existing career, technical and vocational programs in British Columbia. There is also a need to revitalize many existing programs (particularly those involving the application of science and technology) through curriculum redevelopment and implementation.

> Changes in the labour market, world economy and technology will require the development of new training programs to meet these challenges and provide employment opportunities for British Columbians.

F. Enrolment and Facilities Growth Model

> In the past it has been difficult to understand the distribution of additional resources to the college system. It does not seem that the allocation of funding increases take into consideration the needs of underserved and rapidly growing regions such as those of the Fraser Valley. As a result the residents of a few college regions have been unfairly disadvantaged by less access to college programming than other British Columbians.

> The inequities which exist in the allocation of college operating funding, and funded enrolment capacities unfairly disadvantage the residents of some regions by using a substantial part of local taxpayers dollars to fund post-secondary education outside their communities, to which they are then unable to gain access.

> A Community College Enrolment Growth Model is needed which would: increase provincial and regional participation in post-secondary education; provide a more equitable process, based on reasonable criteria for distributing provincial resources for post-secondary education to the citizens who are paying for them with their tax dollars; raise the enrolment capacity of institutions currently significantly below the average rate (Kwantlen, North Island, Douglas and Fraser Valley) to the provincial norm, within a reasonable timeframe; and, provide greater accountability for the allocation of scarce public resources.

G. Long Term Operational Grant Process

> There is a need to provide the College/Institute/Agency system with greater public operational funding stability and assurances of the resources required to enable it to truly serve as a greater catalyst for economic and human development. A longer term operational grant process would encourage institutions to be more innovative in program development and delivery, and in searching out ways to increase public and private training partnerships.

> There is a need for special sensitivity in the process to providing adequate support to meet the special equipment needs of many career and vocational programs, especially those that serve the province as a whole and not merely local needs.

H. Expansion of Public and Private Partnerships

> Canadian industry spends less than half as much on training its employees as American industry does, a fifth as much as the Japanese and an eighth as much as the Germans. Clearly if we are to compete with these nations the gap must be narrowed.

> Our College/Institute/Agency system institutions must increase there efforts to establish more and stronger partnerships with business and industry.

> It is only with a greater public and private investment in post-secondary education and training that we will be able to respond effectively to the many new challenges our society faces as we approach the turn of the century.

APPENDIX A

TASK FORCE MEMBERSHIP

Appendix A

ACCESS TASK FORCE

MEMBERSHIP

CHAIR:

Adrienne MacLaughlin
President, Kwantlen College

MEMBERS:

John Watson
President, B.C.I.T.

Shell Harvey
A.D.M., M.A.E.T.T.

Ed Lavalle (Observer only)
President, C.U.C.I.

Gary Bauslaugh
Vice President, Malaspina U.C.

Lou Dryden
Vice President, Camosun College

Gail Bernacki
Board Chair, U.C. of the Okanagan

Greg Lee
Dean, Capilano College

Sheila Corbert-Kearns
Dean, Malaspina U.C.

Rosanne Moran
C.I.E.A. Staff Representative

Kathy Conroy
President, C.I.E.A.

Gil Johnson
Executive Director, A.E.C.B.C.

Bob Cowin,
Manager, Inst. Research, Douglas College

RESOURCE PERSON:

John Bowman,
Director, Planning/Research
Kwantlen College

APPENDIX B

DETAILED ENROLMENT TABLES

FTE ENROLMENTS BY POST-SECONDARY SECTOR 8593PENR.WKS
1985/86, 1990/91 & 1992/93

	1985/86 FUNDED	1985/86 ACTUAL	1990/91 FUNDED	1990/91 ACTUAL	1992/93 FUNDED	GROWTH IN FUNDED 1985/86 - 1992/93 FTE'S	GROWTH IN FUNDED 1985/86 - 1992/93 % CHANGE
UNIVERSITIES							
UNDERGRADUATE	36,941.0	36,941.0	42,132.0	42,970.0	43,918.0	6,977.0	18.9%
GRADUATE	5,055.0	5,055.0	6,130.0	6,305.0	6,580.0	1,525.0	30.2%
SUBTOTAL	41,996.0	41,996.0	48,262.0	49,275.0	50,498.0	8,502.0	20.2%
UNIVERSITY-COLLEGES							
YEARS 3 AND 4	0.0	0.0	751.0	667.0	1,863.0	1,863.0	n.a.
SUBTOTAL	0.0	0.0	751.0	667.0	1,863.0	1,863.0	n.a.
COMMUNITY COLLEGES							
UNIVERSITY TRANSFER	11,899.0	12,292.5	17,265.8	17,400.0	21,138.8	9,239.8	77.7%
VOC/CAREER TECH/ABE	27,316.9	25,073.2	31,171.2	29,106.5	30,492.8	3,175.9	11.6%
SUBTOTAL	39,215.9	37,365.7	48,437.0	46,506.5	51,631.6	12,415.7	31.7%
OPEN LEARNING AGENCY							
UNIVERSITY TRANSFER	523.2	606.7	926.7	926.7	968.4	445.2	85.1%
VOC/CAREER TECH/ABE	962	1115.5	1194.5	1194.5	1248.2	286.2	29.8%
SUBTOTAL	1485.2	1722.2	2121.2	2121.2	2216.6	731.4	49.2%
INSTITUTES							
VOC/CAREER TECH/ABE	10,800.0	10,345.6	9,548.7	8,613.3	9,965.7	(834.3)	-7.7%
SUBTOTAL	10,800.0	10,345.6	9,548.7	8,613.3	9,965.7	(834.3)	-7.7%
TOTALS	93,497.1	91,429.5	109,119.9	107,183.0	116,174.9	22,677.8	24.3%

SOURCE: MAETT

ENROLMENT BY PROGRAM CLUSTER
1985/86, 1990/91 & 1992/93

8593ENR.WKS

PROGRAM	1985/86 FUNDED	1985/86 ACTUAL	1990/91 FUNDED	1990/91 ACTUAL	1992/93 FUNDED	FUNDED GROWTH 1985/86 - 1992/93 FTE'S	FUNDED GROWTH 1985/86 - 1992/93 % CHANGE
ACADEMIC	11,959.0	12,363.5	18,116.8	18,236.4	21,930.8	9,971.8	83.4%
NURSING	2,376.7	2,225.5	3,070.3	2,783.9	3,252.1	875.4	36.8%
MECHANICS	1,083.3	828.0	1,490.2	1,134.4	1,746.5	663.2	61.2%
MANAGERIAL	5,656.1	5,467.0	6,136.7	6,003.9	6,317.3	661.2	11.7%
FINE ARTS	1,810.5	2,016.6	2,263.9	2,390.2	2,359.8	549.3	30.3%
LEGAL/SOCIAL SERVICES	1,375.6	1,513.5	1,759.4	1,777.3	1,893.4	517.8	37.6%
ADULT BASIC EDUCATION	4,357.8	3,947.2	4,788.7	4,340.5	4,851.2	493.4	11.3%
HEALTH	1,057.5	986.9	1,344.6	1,251.9	1,493.1	435.6	41.2%
ESL	1,676.0	1,517.5	1,932.0	1,947.7	2,095.5	419.5	25.0%
ADULT SPECIAL EDUCATION	396.2	384.2	671.1	619.1	732.2	336.0	84.8%
CONSTRUCTION	724.7	458.2	738.4	678.5	913.4	188.7	26.0%
COMMUNICATION ARTS	747.1	767.4	940.1	879.5	913.6	166.5	22.3%
PART-TIME VOCATIONAL	1,643.0	1,660.3	1,779.1	2,238.7	1,795.0	152.0	9.3%
EDUCATION	504.3	395.2	626.2	647.6	630.3	126.0	25.0%
MARINE	225.2	217.3	311.9	266.3	316.9	91.7	40.7%
PERSONAL SERVICES	1,711.0	1,714.2	2,089.4	1,402.8	1,792.3	81.3	4.8%
RESOURCE	753.6	606.7	782.4	628.2	781.7	28.1	3.7%
LAND & AIR TRANSPORTATION	82.8	34.9	70.0	64.2	70.0	(12.8)	-15.5%
AGRICULTURE	382.7	266.8	447.0	324.3	355.4	(27.3)	-7.1%
OFFICE ADMIN.	2,676.8	2,443.9	2,694.2	2,520.8	2,556.6	(120.2)	-4.5%
METAL TRADES	949.8	671.2	726.0	693.5	814.5	(135.3)	-14.2%
ELECTRICAL/ELECTRONICS	1,951.9	1,595.9	1,683.7	1,195.2	1,770.2	(181.7)	-9.3%
COMPUTING	1,797.6	1,513.2	1,437.6	1,485.1	1,545.4	(252.2)	-14.0%
ENGINEERING	1,605.4	1,227.6	1,245.7	1,072.8	1,296.9	(308.5)	-19.2%
TRAINING ACCESS	2,511.3	2,888.6	1,591.3	1,204.2	1,236.2	(1,275.1)	-50.8%
TOTAL	50,015.9	47,711.3	58,736.7	55,787.0	63,460.3	13,444.4	26.9%

SOURCE: MAETT

ENROLMENT CAPACITY PER 1000 POPULATION
(1992/93 FUNDED FTE ENROLMENT)

9293ENCA.WKS

	1992/93 ENROLMENT	TOTAL POPULATION (IN 000'S) 1992	2007	GROWTH '92-07	% GROWTH '92-07	1992/93 ENROLMENT PER 1000 POP.
VANCOUVER ISLAND						
CAMOSUN	4,661.6	303,153	381,293	78,140	25.8%	15.4
MALAPINA	4,190.9	171,877	206,787	34,910	20.3%	24.4
NORTH ISLAND	1,395.7	130,151	150,578	20,427	15.7%	10.7
SUBTOTAL	10,248.2	605,181	738,658	133,477	22.1%	16.9
LOWER MAINLAND						
CAPILANO	4,161.0	202,660	238,259	35,599	17.6%	20.5
VANCOUVER	10,033.2	479,905	566,780	86,875	18.1%	20.9
DOUGLAS	4,665.0	414,755	518,471	103,716	25.0%	11.2
KWANLTEN	4,991.6	568,680	804,973	236,293	41.6%	8.8
FRASER VALLEY	2,553.4	187,733	291,607	103,874	55.3%	13.6
SUBTOTAL	26,404.2	1,853,733	2,420,090	566,357	30.6%	14.2
SOUTHERN INTERIOR						
CARIBOO	4,166.1	142,225	183,483	41,258	29.0%	29.3
OKANAGAN	4,741.6	261,672	334,572	72,900	27.9%	18.1
SELKIRK	1,848.5	70,504	69,841	(663)	-0.9%	26.2
EAST KOOTENAY	1,130.9	64,127	76,387	12,260	19.1%	17.6
SUBTOTAL	11,887.1	538,528	664,283	125,755	23.4%	22.1
NORTH						
NEW CALEDONIA	2,582.1	134,765	191,612	56,847	42.2%	19.2
NORTHWEST	1,143.8	79,660	97,229	17,569	22.1%	14.4
NORTHERN LIGHTS	1,032.8	56,073	70,198	14,125	25.2%	18.4
SUBTOTAL	4,758.7	270,498	359,039	88,541	32.7%	17.6
COLLEGES SUB TOTAL	53,298.2	3,267,940	4,182,070	914,130	28.0%	16.3
INSTITUTES						
BCIT	9,110.7	N/A	N/A	N/A	N/A	2.8
OPEN LEARNING	2,216.6	N/A	N/A	N/A	N/A	0.7
EMILY CARR	852.0	N/A	N/A	N/A	N/A	0.3
PACIFIC MARINE	199.4	N/A	N/A	N/A	N/A	0.1
INSTITUTES SUBTOTAL	12,378.7	3,267,940	4,182,070	914,130	28.0%	3.8
TOTALS	65,676.9	3,267,940	4,182,070	914,130	28.0%	20.1

B.C. OPERATING GRANTS FOR EDUCATION 9293OPGR.W
1992/93

SCHOOLS	
PUBLIC	3,078,658,162
INDEPENDENT	98,855,166
TOTAL - SCHOOLS	3,177,513,328
POST-SECONDARY	
COMMUNITY COLLEGES	362,325,170
INSTITUTES	90,785,703
OPEN LEARNING AGENCY	22,753,541
UNIVERSITIES	473,424,085
TOTAL - UNIVERSITITES, COLLEGES AND INSTITUTES	949,288,499